

Hilbert Public Noticed Fact Sheet

General Information

Permit Number:	WI-0021270-11-0	
Permittee:	Village of Hilbert, PO Box 266, 26 North Sixth Street, Hilbert WI 54129-0266	
Discharge Location:	The street address of the facility is N7040 Irish Road, Hilbert. The outfall is located in the NW ¼ of the SW ¼ of Section 5, T 19N R 20E	
Receiving Water:	the unnamed tributary to the North Branch Manitowoc River, located in the North Branch Manitowoc River Watershed in the Lake Shore Basin, Calumet County, WI	
StreamFlow (Q _{7,10}):	0 cfs	
Stream Classification:	This tributary is listed in NR 104 as a “Noncontinuous” stream, with a Limited Forage Fishery use designation from the Village to the confluence with the North Branch of the Manitowoc River.	
Design Flow(s)	Daily Maximum	3.56 MGD (source: February 2004 Fact Sheet)
	Weekly Maximum	0.945 MGD (source: February 2004 Fact Sheet)
	Monthly Maximum	0.577 MGD (source: February 2004 Fact Sheet)
	Annual Average	0.326 MGD (source: Nov 2021 WBQEL memo)
Significant Industrial Loading?	Sargento Foods, Ornua Ingredients and DS Enterprises	
Operator at Proper Grade?	Current operator is Timothy J Keuler is certified in A1, B, C, D, L AND P the advanced level	
Approved Pretreatment Program?	N/A	

Facility Description

Raw wastewater is collected via a conventional gravity sewer system from throughout the Village. At the facility wastewater is first pumped to the preliminary treatment process, consisting of a vertical spiral fine screen and a back-up manually-cleaned bar rack. Flow monitoring is performed via a magmeter in the force main, which is equipped with secondary instrumentation. Two lagoons are available for wet weather influent flow equalization. A dissolved flotation unit follows, which is used to remove fats, oils and grease. Wastewater then enters an oxidation ditch. Alum is added, and the three channels of the oxidation ditch are operated to enhance biological phosphorus removal. Mixed liquor then flows to a single final clarifier, and the clarified effluent is discharged. Effluent flow monitoring is accomplished via a V-notch weir in an open channel preceding the outfall, which contains an ultrasonic level sensor and appropriate instrumentation. Waste activated sludge is further stabilized in an aerobic digester/holding tank, and it is then dewatered with a belt filter press. Ultimate disposal of sludge is by land application. The facility receives about 100,000 gpd of septage which is discharged to the facility via an aerated septage receiving tank. No major operational changes are anticipated in the next permit term. Significant changes in the upcoming permit term are as follows: 1) the influent and effluent monitoring frequency for BOD & TSS has increased from 2/monthly to 2/weekly, 2) the conditional approval of a multi-discharger variance (MDV) for phosphorus and the imposition of a lower monthly average interim effluent phosphorus limit along with associated compliance schedules to comply with s. 283.16, Wis. Stats. requirements for phosphorus, 3) the addition of annual effluent monitoring for total nitrogen, nitrite + nitrate nitrogen and total Kjeldahl nitrogen and 4) the monitoring

frequency at both sludge outfalls has increased. A compliance schedule was added this permit term that requires the permittee submit a land application management plan.

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)
701	Influent: 0.27 MGD (average during Jan. 2017 – August 2021)	Representative influent samples shall be collected from the automatic sampling device drawing samples at the influent channel immediately after the vertical spiral fine screen.
001	Effluent to Surface Water: 0.262 MGD (average during Jan. 2017 – August 2021)	Effluent: Representative samples shall be collected from the open channel preceding the outfall. Composite samples shall be collected from the automatic sampling device drawing samples from this location.
003	Landspreading of Liquid Sludge: 42 metric tons (average 2016-2020)	Representative samples of liquid sludge shall be collected annually from the sludge storage tank after complete mixing and monitored for Lists 1 & 2 and the requirements for Lists 3 & 4 shall be met.
004	Landspreading of Liquid Sludge: 346 metric tons (average 2016-2020)	Representative samples of the cake sludge shall be collected quarterly from the sludge storage building and monitored for Lists 1 & 2 and the requirements of Lists 3 & 4 shall be met. Sludge shall be monitored for PCBs once in 2023.

1 Influent - Monitoring

Sample Point Number: 701- INFLUENT AFTER SCREENING

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
BOD5, Total		mg/L	3/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total		mg/L	3/Week	24-Hr Flow Prop Comp	

Changes from Previous Permit:

The influent monitoring frequency for BOD and TSS were increased from 2/Week to 3/Week, similar to the changes made at the effluent for the same parameters. See effluent section below for more information.

Explanation of Limits and Monitoring Requirements

Influent monitoring is needed to assess loading to facility and treatment plant performance. Influent monitoring requirements are in accordance with NR 206.09(2).

2 Surface Water - Monitoring and Limitations

Sample Point Number: 001- Effluent

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
BOD5, Total	Daily Max	30 mg/L	3/Week	24-Hr Flow Prop Comp	
BOD5, Total	Monthly Avg	15 mg/L	3/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Daily Max	30 mg/L	3/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Monthly Avg	15 mg/L	3/Week	24-Hr Flow Prop Comp	
Dissolved Oxygen	Daily Min	4.0 mg/L	Daily	Grab	
pH Field	Daily Max	9.0 su	Daily	Grab	
pH Field	Daily Min	6.0 su	Daily	Grab	
Nitrogen, Ammonia (NH3-N) Total	Daily Max - Variable	mg/L	3/Week	24-Hr Flow Prop Comp	Daily max limit varies with effluent pH. See ammonia subsection below for limits.
Nitrogen, Ammonia Variable Limit		mg/L	3/Week	24-Hr Flow Prop Comp	
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	5.9 mg/L	3/Week	24-Hr Flow Prop Comp	Limit applies Jan - March
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	15 mg/L	3/Week	24-Hr Flow Prop Comp	Limit applies Jan - March
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	2.5 mg/L	3/Week	24-Hr Flow Prop Comp	Limit applies April - May
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	6.3 mg/L	3/Week	24-Hr Flow Prop Comp	Limit applies April - May
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	2.1 mg/L	3/Week	24-Hr Flow Prop Comp	Limit applies June - Sept
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	5.2 mg/L	3/Week	24-Hr Flow Prop Comp	Limit applies June - Sept
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	3.5 mg/L	3/Week	24-Hr Flow Prop Comp	Limit applies Oct - Dec
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	8.9 mg/L	3/Week	24-Hr Flow Prop Comp	Limit applies Oct - Dec

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Phosphorus, Total	Monthly Avg	1.0 mg/L	3/Week	24-Hr Flow Prop Comp	This is an interim limit effective through 03/31/2023. See the MDV/Phosphorus subsections and phosphorus schedules.
Phosphorus, Total	Monthly Avg	0.8 mg/L	3/Week	24-Hr Flow Prop Comp	This is an interim MDV limit effective 04/01/2023. See the MDV/Phosphorus subsections and phosphorus compliance schedules.
Phosphorus, Total		lbs/month	Monthly	Calculated	Report the total monthly phosphorus discharged in lbs/month on the last day of the month on the DMR. See Standard Requirements for 'Appropriate Formulas' to calculate the Total Monthly Discharge in lbs/month.
Phosphorus, Total		lbs/yr	Annual	Calculated	Report the sum of the total monthly discharges for the calendar year on the Annual report form.
Temperature Maximum	Weekly Avg	54 deg F	3/Week	Multiple Grab	Limit applies in November. Monitoring required year-round. See Temp. section below for more info.
Nitrogen, Total Kjeldahl		mg/L	See Listed Qtr(s)	24-Hr Flow Prop Comp	Monitoring required annually in specific quarters. See Nitrogen Series Monitoring subsection below for more info.
Nitrogen, Nitrite + Nitrate Total		mg/L	See Listed Qtr(s)	24-Hr Flow Prop Comp	
Nitrogen, Total		mg/L	See Listed Qtr(s)	Calculated	
Chronic WET		TUc	See Listed Qtr(s)	24-Hr Flow Prop Comp	
Chronic WET	Monthly Avg	1.0 TUc	See Listed Qtr(s)	24-Hr Flow Prop Comp	See WET testing section below.
Acute WET		TUa	See Listed Qtr(s)	24-Hr Flow Prop Comp	

Changes from Previous Permit

The effluent monitoring frequency for BOD, TSS, dissolved oxygen, pH, phosphorus and ammonia nitrogen were increased. Monitoring frequencies are based on the size and type of the facility and are established to best characterize effluent quality and variability, to detect events of noncompliance, and to ensure fairness and consistency in permits issued across the state. Requirements in administrative code and state statute were considered when determining the appropriate monitoring frequencies for pollutants that have final effluent limits in effect during this permit term. The department has determined at this time that an increase in monitoring frequency is warranted based on the size and type of the facility.

Phosphorus MDV - The permittee has applied for a multi-discharger variance (MDV) for phosphorus for this permit term and the application has been approved by the Department. An MDV interim limit of 0.8 mg/L has been added that goes into effect on April 1, 2023 per the compliance schedule. The permittee is now required to report the total amount of phosphorus discharged in lbs/month and lbs/year. By March 1 of each year the permittee shall make a payment(s) to participating county(s) of \$54.99 per pound of phosphorus discharged during the previous year in excess of the target value of 0.2 mg/L.

Other significant changes are as follows: 1) A temperature limit has been added in the month of November, 2) a chronic WET limit has been included and the chronic WET testing frequency increased to annual, 3) annual monitoring for total nitrogen, nitrite + nitrate nitrogen and total Kjeldahl nitrogen has been added. For more information on these changes see the limits memo referenced below and additional info. provided below.

Explanation of Limits and Monitoring Requirements

Limits were determined for the Village of Hilbert's existing discharge to the unnamed tributary to the North Branch Manitowoc River using chs. NR 102, 104, 105, 106, 207, 210, 212 and 217 of the Wisconsin Administrative Code (where applicable). For more information see the August 17, 2021 memo from Nicole Krueger to Holly Heldstab titled "Water Quality-Based Effluent Limitations for the Village of Hilbert WPDES Permit No. WI-0021270-11".

BOD5, TOTAL SUSPENDED SOLIDS (TSS), DO AND pH – Although monitoring frequencies increased, no changes were made to the permit limitations for BOD5, TSS, DO or pH. Because the reference effluent flow rates and receiving water characteristics have not changed, limitations do not need to be re-evaluated at this time.

AMMONIA - Current acute and chronic ammonia toxicity criteria for the protection of aquatic life are included in Tables 2C and 4B of ch. NR 105, Wis. Adm. Code. Subchapter IV of ch. NR 106 establishes the procedure for calculating water quality based effluent limitations (WQBELs) for ammonia. There has been a change in expression of limits per the 2016 revisions to NR 205.065. In accordance with the federal regulation 40 CFR 122.45(d), limits in this permit are to be expressed as weekly average and monthly average limits whenever practicable. The weekly and monthly average ammonia limits satisfy this requirement. See the limits memo referenced above for more information. In addition to the weekly and monthly average limits listed in the table below, daily maximum ammonia limits that vary with effluent pH apply. See table below titled "Variable Daily Maximum Ammonia Limits" for more information. When possible, samples for ammonia shall be collected at the same time as the pH samples.

Effluent pH s.u.	Limit mg/L	Effluent pH s.u.	Limit mg/L	Effluent pH s.u.	Limit mg/L
6.0 ≤ pH ≤ 6.1	54	7.0 < pH ≤ 7.1	33	8.0 < pH ≤ 8.1	6.9
6.1 < pH ≤ 6.2	53	7.1 < pH ≤ 7.2	30	8.1 < pH ≤ 8.2	5.7
6.2 < pH ≤ 6.3	52	7.2 < pH ≤ 7.3	26	8.2 < pH ≤ 8.3	4.7
6.3 < pH ≤ 6.4	51	7.3 < pH ≤ 7.4	23	8.3 < pH ≤ 8.4	3.9
6.4 < pH ≤ 6.5	49	7.4 < pH ≤ 7.5	20	8.4 < pH ≤ 8.5	3.2
6.5 < pH ≤ 6.6	47	7.5 < pH ≤ 7.6	17	8.5 < pH ≤ 8.6	2.7
6.6 < pH ≤ 6.7	45	7.6 < pH ≤ 7.7	14	8.6 < pH ≤ 8.7	2.2
6.7 < pH ≤ 6.8	42	7.7 < pH ≤ 7.8	12	8.7 < pH ≤ 8.8	1.8

6.8 < pH ≤ 6.9	39	7.8 < pH ≤ 7.9	10	8.8 < pH ≤ 8.9	1.6
6.9 < pH ≤ 7.0	36	7.9 < pH ≤ 8.0	8.4	8.9 < pH ≤ 9.0	1.3

PHOSPHORUS – Phosphorus rules became effective December 1, 2010 per NR 217, Wis. Adm. Code, that required the permittee to comply with water quality based effluent limits (WQBELs) for total phosphorous. The final phosphorus WQBELs are 0.225 (monthly average) & 0.075 mg/L and 0.20 lbs/day (6-month averages) and were to become effective as scheduled unless a variance was granted. For this permit term, the permittee has applied for the Multi-Discharger Variance (MDV) for phosphorus as provided for in s. 283.16, Wis. Stats., and approved by USEPA on February 6, 2017 until February 5, 2027. The permittee qualifies for the MDV because it is an existing source and a major facility upgrade is needed to comply with the applicable phosphorus WQBELs, thereby creating a financial burden. The interim MDV effluent limit for total phosphorus is 0.8 mg/L as a monthly average limit. The limit was derived using DMR data from 09/01/2018 to 08/31/2021. As the facility cannot currently meet this limitation, the monthly average limit of 1.0 mg/L will be effective until the 0.8 mg/L becomes effective on 04/01/2023.

Conditions of the MDV require the permittee to optimize phosphorus removal throughout the permit term, comply with interim limits and make annual payments to participating county(s) by March 1 of each year based on the pounds of phosphorus discharged during the previous year in excess of the specified target value. The “price per pound” value is \$50.00 adjusted for CPI annually during the first quarter as defined by s. 283.16(8)(a)2, Wis. Stats and takes effect for reissued permits with effective dates starting April 1. This may differ from the “price per pound” that is public noticed; however, the “price per pound” is set upon reissuance and is applicable for the entire permit term. The participating county(s) uses these payments to implement non-point source (agricultural and urban) phosphorus control strategies at the watershed level.

TEMPERATURE - Surface water quality standards for temperature took effect on October 1, 2010. These regulations are detailed in chs. NR 102 (Subchapter II – Water Quality Standards for Temperature) and NR 106 (Subchapter V – Effluent Limitations for Temperature) of the Wisconsin Administrative Code. Using the representative highest effluent temperature data collected by the permittee from 04/01/2013 – 05/31/2014, that data was compared to the calculated effluent limits to determine the reasonable potential of exceeding the effluent temperature limits. Based on this analysis, weekly average temperature maximum limits are required for the month of November. Monitoring is recommended year-round. The permittee has indicated a compliance schedule is not necessary as they will be able to meet the limit beginning November 2022.

TOTAL NITROGEN MONITORING (NO₂+NO₃, TKN AND TOTAL N) - The Department has included effluent monitoring for Total Nitrogen in the permit through the authority under §§ 283.55(1)(e), Wis. Stats., which allows the department to require the permittee to submit information necessary to identify the type and quantity of any pollutants discharged from the point source, and through s. NR 200.065(1)(h), Wis. Adm. Code, which allows for this monitoring to be collected during the permit term. More information on the justification to include total nitrogen monitoring in wastewater permits can be found in the “Guidance for Total Nitrogen Monitoring in Wastewater Permits” dated October 1, 2019. Monitoring for total nitrogen, nitrite + nitrate nitrogen and TKN is required in the following quarters:

- 2nd quarter (April-June) 2022
- 3rd quarter (July-Sept) 2023
- 4th quarter (Oct-Dec) 2024
- 2nd quarter (April-June) 2025
- 1st quarter (Jan-March) 2026

WHOLE EFFLUENT TOXICITY - Acute and Chronic whole effluent toxicity (WET) testing requirements and the chronic WET limit are determined in accordance with ss. NR 106.08 and NR 106.09 Wis. Adm. Code, as revised August 2016. See the current version of the Whole Effluent Toxicity Program Guidance Document and checklist and WET information, guidance and test methods at <http://dnr.wi.gov/topic/wastewater/wet.html>.

Acute WET testing is recommended twice during the permit term in the following quarters:

- 3rd quarter (July – Sept) 2022
- 1st quarter (Jan – March) 2026.

Chronic WET testing is recommended annually in the following quarters:

- 3rd quarter (July – Sept) 2022
- 2nd quarter (April – June) 2023
- 4th quarter (Oct – Dec) 2024
- 3rd quarter (July – Sept) 2025
- 1st quarter (Jan – March) 2026

DISINFECTION - Disinfection of the effluent is not required based on the conditions of s. NR 210.06(3), Wis. Adm. Code.

3 Land Application - Monitoring and Limitations

Municipal Sludge Description						
Sample Point	Sludge Class (A or B)	Sludge Type (Liquid or Cake)	Pathogen Reduction Method	Vector Attraction Method	Reuse Option	Amount Reused/Disposed (Dry Tons/Year)
003	B	Liquid	fecal coliform density, aerobic digestion	Injection, incorporation	Land application	42 MT
004	B	Cake	fecal coliform density, aerobic digestion	Injection, incorporation	Land application	346 MT
Does sludge management demonstrate compliance? Yes						
Is additional sludge storage required? No						
Is Radium-226 present in the water supply at a level greater than 2 pCi/liter? No						
Is a priority pollutant scan required? No						

Sample Point Number: 003- Liquid Sludge

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	Annual	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Annual	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Annual	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Annual	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Annual	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Annual	Composite	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Copper Dry Wt	High Quality	1,500 mg/kg	Annual	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Annual	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Annual	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Annual	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Annual	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Annual	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Annual	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Annual	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Annual	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Annual	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Annual	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Annual	Composite	
Nitrogen, Total Kjeldahl		Percent	Annual	Composite	
Nitrogen, Ammonium (NH ₄ -N) Total		Percent	Annual	Composite	
Phosphorus, Total		Percent	Annual	Composite	
Phosphorus, Water Extractable		% of Tot P	Annual	Composite	
Potassium, Total Recoverable		Percent	Annual	Composite	

Sample Point Number: 004- Cake Sludge

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	Quarterly	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Quarterly	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Quarterly	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Quarterly	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Quarterly	Composite	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Copper Dry Wt	High Quality	1,500 mg/kg	Quarterly	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Quarterly	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Quarterly	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Quarterly	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Quarterly	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Quarterly	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Quarterly	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Quarterly	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Quarterly	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Quarterly	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Quarterly	Composite	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Composite	
Nitrogen, Ammonium (NH ₄ -N) Total		Percent	Quarterly	Composite	
Phosphorus, Total		Percent	Quarterly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		Percent	Quarterly	Composite	
PCB Total Dry Wt	Ceiling	50 mg/kg	Once	Composite	Once in 2023
PCB Total Dry Wt	High Quality	10 mg/kg	Once	Composite	Once in 2023

Changes from Previous Permit for Sludge Outfalls 003 (Liquid) and 004 (Cake):

The monitoring frequency out Outfall 003 has been changed from “per occurrence” to “annual”. The monitoring frequency at Outfall 004 has been increased from annually to quarterly. The quantity of sludge landspread annually has increased. The monitoring frequencies have been established per s. NR 204.06(2)(c) Wis. Adm. Code. Note that the permittee is required to submit a land application management plan by 12/31/2023. See the compliance schedule section below for more information.

Explanation of Limits and Monitoring Requirements for Sludge Outfalls 003 (Liquid) and 004 (Cake)

(Requirements for land application of municipal sludge are determined in accordance with ch. NR 204 Wis. Adm. Code. Ceiling and high quality limits for metals in sludge are specified in s. NR 204.07(5). Requirements for pathogens are specified in s. NR 204.07(6) and in s. NR 204.07 (7) for vector attraction requirements. Limitations for PCBs are addressed in s. NR 204.07(3)(k). Radium requirements are addressed in s. NR 204.07(3)(n).

WATER EXTRACTABLE PHOSPHORUS

Water extractable phosphorus (WEP) is the coefficient for determining plant available phosphorus from measured total phosphorus. In Wisconsin, the Penn State Method is utilized and is expressed in percent. While a total P may be significant, the WEP may show that only a small percentage of the P is available to plants because of factors such as treatment processes and chemical addition that “tie-up” phosphorus limiting the amount of phosphorus that is plant available. As part of the Wisconsin’s nutrient management plan (NMP) requirements, the accounting of all fertilizers must be included over the NMP cycle. The fertilizer value of the waste needs to be communicated to the farmer and accounted for in the NMP.

4 Compliance Schedules

4.1 Phosphorus Multi-Discharger Variance Interim Limit (0.8 mg/L)

This compliance schedule requires the permittee to achieve compliance with the specified MDV interim effluent limit in accordance with s. 283.16(6), Wis. Stats., by the due date.

Required Action	Due Date
Action Plan: Submit an action plan for complying with the specified interim effluent limit.	05/31/2022
Initiate Actions: Initiate actions identified in the plan.	09/30/2022
Complete Actions: Complete actions identified in the plan and achieve compliance with the interim MDV effluent limit of 0.8 mg/L. Limit becomes effective 04/01/2023.	03/31/2023

4.2 Phosphorus Payment per Pound to County

The permittee is required to make annual payments for phosphorus reductions to the participating county or counties in accordance with s. 283.16(8), Wis. Stats., and the following schedule. The price per pound will be set at the time of permit reissuance and will apply for the duration of the permit.

Required Action	Due Date
<p>Annual Verification of Phosphorus Payment to County: The permittee shall make a total payment to the participating county or counties approved by the Department by March 1 of each calendar year. The amount due is equal to the following: [(lbs of phosphorus discharged minus the permittee’s target value) times (\$54.99 per pound)] or \$640,000, whichever is less. See the payment calculation steps in the Surface Water section.</p> <p>The permittee shall submit Form 3200-151 to the Department by March 1 of each calendar year indicating total amount remitted to the participating counties to verify that the correct payment was made. The first payment verification form is due by the specified Due Date.</p> <p>Note: The applicable Target Value is 0.2 mg/L as defined by s. 283.16(1)(h), Wis. Stats. The "per pound" value is \$50.00 adjusted for CPI.</p>	

Annual Verification of Payment #2: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2023
Annual Verification of Payment #3: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2024
Annual Verification of Payment #4: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2025
Annual Verification of Payment #5: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2026
Continued Coverage: If the permittee intends to seek a renewed variance, an application for the MDV (Multi Discharger Variance) shall be submitted as part of the application for permit reissuance in accordance with s. 283.16(4)(b), Wis. Stats.	
Annual Verification of Payment After Permit Expiration: In the event that this permit is not reissued prior to the expiration date, the permittee shall continue to submit Form 3200-151 to the Department indicating total amount remitted to the participating counties by March 1 each year.	

4.3 Phosphorus Schedule - Continued Optimization

The permittee is required to optimize performance to control phosphorus discharges per the following schedule.

Required Action	Due Date
Optimization: The permittee shall continue to implement the optimization plan as previously approved to optimize performance to control phosphorus discharges. Submit a progress report on optimizing removal of phosphorus by the Due Date.	03/31/2023
Progress Report #2: Submit a progress report on optimizing removal of phosphorus.	03/31/2024
Progress Report #3: Submit a progress report on optimizing removal of phosphorus.	03/31/2025
Progress Report #4: Submit a progress report on optimizing removal of phosphorus.	03/31/2026

4.4 Land Application Management Plan

A management plan is required for the land application system.

Required Action	Due Date
Land Application Management Plan Submittal: Submit a management plan to optimize the land application system performance and demonstrate compliance with ch. NR 204, Wis. Adm. Code, by the Due Date. This management plan shall 1) specify information on pretreatment processes (if any); 2) identify land application sites; 3) describe site limitations; 4) address vegetative cover management and removal; 5) specify availability of storage; 6) describe the type of transporting and spreading vehicle(s); 7) specify monitoring procedures; 8) track site loading; 9) address contingency plans for adverse weather and odor/nuisance abatement; and 10) include any other pertinent information. Once approved, all landspreading activities shall be conducted in accordance with the plan. Any changes to the plan must be approved by the Department prior to implementing the changes.	12/31/2022

Explanation of Compliance Schedules

Interim Limit

Subsection 283.16(6), Wis. Stats., establishes required interim phosphorus effluent limits that must be met for multi-discharger variance (MDV) eligibility. The schedule above provides the permittee with two years to comply with that limit.

County Payment

Subsection 283.16(6)(b), Wis. Stats., requires permittees that have received approval for the multi-discharger variance (MDV) to implement a watershed project that is designed to reduce non-point sources of phosphorus within the HUC 8 watershed in which the permittee is located. The permittee has selected the “Payment to Counties” watershed option described in s. 283.16(8), Wis. Stats. Under this option the permittee shall make annual payment(s) to participating county(s) that are calculated based on the amount of phosphorus actually discharged during a calendar year in pounds per year less the amount of phosphorus that would have been discharged had the permittee discharged phosphorus at a target value concentration of 0.2 mg/L. The pounds of phosphorus discharged in excess of the target value is multiplied by a per pound phosphorus charge that will equal \$51.10 per pound. This schedule requires the permittee to submit Form 3200-151 to the Department indicating the total amount remitted to the participating county(s).

Continued Optimization

Per s. 283.16(6)(a), Wis. Stats. the Department may include a requirement that the permittee optimize the performance of a point source in controlling phosphorus discharges, which may be necessary to achieve compliance with multi-discharger variance interim limits. This compliance schedule requires the permittee to continue to implement the optimization plan that was approved during the previous permit term.

Land Application Management Plan

This schedule requires the submittal of a Land Application Management Plan that documents how the permittee will manage the land application of biosolids consistent with ch. NR 204, Wis. Adm. Code.

Special Reporting Requirements

None

Other Comments:

Publishing Newspaper: Chilton Times – Journal, PO Box 227, Chilton, WI 53014-0227

Attachments:

- Substantial Compliance Determination, dated 09/14/2021 and completed by Dave Haas (in SWAMP)
- August 17, 2021 memo from Nicole Krueger to Holly Heldstab titled “Water Quality-Based Effluent Limitations for the Village of Hilbert WPDES Permit No. WI-0021270-11” (in SWAMP)
- The 11/04/2021 “Multi-discharger Variance Evaluation Checklist” completed by Matthew Clagherty (in SWAMP)
- The 11/04/2021 letter from the DNR granting “Conditional Approval of the Multi-discharger Phosphorus Variance” completed by Matthew Clagherty (in SWAMP)

Expiration Date:

December 31, 2026

Justification Of Any Waivers From Permit Application Requirements

None

Prepared By: Holly Heldstab, Wastewater Specialist

Date: December 22, 2021

cc: SWAMP

DRAFT